

In the Specification

**Please replace the paragraph found on page 20, line 2 through page 21, line 2 of the specification with the following paragraph:**

BCL-2 amplification is performed essentially as described by Tu Y et al., *Upregulated expression of Bcl-2 in multiple myeloma cells induced by exposure to doxorubicin, etoposide, and hydrogen peroxide*, Blood 88:1805,1996. Briefly, 20  $\mu$ L of PCR reaction mixture (IX PCR buffer, 50 pmol of BCL-2 specific amplimers, 0.25 U Taq polymerase [Boehringer-Mannheim], 1.25  $\mu$ Ci [ $\alpha$ -<sup>32</sup>P]-dCTP) is added to 5  $\mu$ L cDNA, followed by incubation at 94°C for 5 minutes and then 26 cycles of 94°C for one minute, 72°C for one minute, and a final extension at 72°C for five minutes in a thermal cycler (Perkin-Elmer Cetus). Histone 3.3 is amplified as described by Futscher Bwet al., *Quantitative polymerase chain reaction analysis of MDR1 mRNA in multiple myeloma cell lines and clinical specimens*, Anal Biochem 213:414, 1993, and is used as a control for RNA integrity and quantity. Bcl-XI and -Xs are amplified essentially as described by Benito A, et al., *Apoptosis induced by erythroid differentiation of human leukemia cell lines is inhibited by Bcl-XL*, Blood 87:3837, 1996, using 26 cycles of PCR. The 258 base pair BAX amplicon is amplified using the following primers (Biosynthesis, Lewisville, Tex.) and conditions: BAX-upstream (5'-ACCAAGAAGCTGAGCGAGTGTC-TC-3') (SEQ ID NO:1), BAXdownstream (5'-CAATGTCCAGCCCATGATGG-3') (SEQ ID NO:2), cDNA denaturation for one minute at 94°C, annealing for 15 seconds at 60°C, primer extension for 15 seconds at 72°C, with a final extension for 5 minutes. All samples are loaded on a five percent nondenaturing polyacrylamide gel and electrophoresed for two hours at 80V. For determination of incorporated radionucleotide, gels are dried down and exposed to a phosphorimaging plate (Molecular Dynamics, Inc) overnight. Plates are then scanned on a phosphorimager (Molecular Dynamics) and band intensities (pixels/unit area) for Bcl-2, Bcl-XI, Bcl-Xs, and BAX are analyzed normalized to Histone 3.3 expression. PCR amplification of the MDRI, MRP, and LRP genes is performed essentially as described by Abbaszadegan M. et al., *Analysis of multidrug resistance-associated protein (MRP) messenger RNA in normal and malignant hematopoietic cells*, Cancer Res 54:4676,1994, and Komarov P. et al., *Activation of the LRP Oun-resistance-associated protein) gene by short-term exposure of human*

*leukemia cells to phorbol ester and cytarabine*, Oncology Res 10: 1 85, 1998, by using the housekeeping genes histone 3.3 (MDRI) or  $\beta$ -actin (MRP and LRP) as internal standards. cDNA synthesized from 8226/DOX6 RNA is used as a positive control for MDRI PCR. For all reactions, optimal cycle numbers are used and are within the exponential range of PCR amplification as determined by previous experiments.

**Please replace the paragraph found on page 33, lines 8-25 of the specification with the following paragraph:**

Total cellular RNA is collected from  $3 \times 10^6$  cells using TRIzol reagent (Gibco). RNA is quantitated on a spectrophotometer at 260 nm. cDNA is synthesized in a 20  $\mu$ l reverse transcription reaction containing 100 ng RNA, 1 X PCR Buffer (10 mM Tris, pH 8.3-50 mM KCl-1.5 mM  $MgCl_2$ ), 1 mM concentrations each of dATP, dGTP, dCTP, and dTTP; 100 pmol random hexamers, 20 units RNase inhibitor, and 6 units avian myeloblastosis virus reverse transcriptase (Boehringer-Mannheim). The reaction is prepared on ice then incubated at 42°C for 1 hour, 99°C for 10 minutes, and quick chilled to 4°. The following primers are synthesized (Gibco/BRL) and used for  $\alpha 4$ -specific PCR reactions: 5'-ATGGCTCCCAATGTTAGTGTGG-3' (upstream) (SEQ ID NO:3) and 5'-CACTGGCTTCTTTTCCACTTTCC-3' (downstream) (SEQ ID NO:4). The 292 base pair  $\alpha 4$  product is amplified using 20  $\mu$ l of PCR reaction mixture (1X PCR buffer, 6.25 pmol of  $\alpha 4$  specific primers), 0.5 units Taq polymerase (Boehringer-Mannheim), and 5  $\mu$ l of cDNA. Samples are subjected to incubation at 94°C for 1 minute and then 34 cycles of 94°C (15 sec), 72°C (15 sec), and a final extension at 72°C for 1 minute in a thermal cycler (Perkin-Elmer Cetus). Histone 3.3 is amplified and used as a control for RNA integrity and quantity. Samples are loaded on a 3 percent agarose gel, electrophoresed one hour at 80V, and visualized using EtBr staining. Restriction digests are used to confirm identity of products.

**Please replace the paragraph found on page 42, lines 20-24 of the specification with the following paragraph:**

A pre-established ~~microtiter~~-microtiter adhesion assay is used to determine if peptides such as RZ-3 are effective at preventing adhesion of myeloma cells to FN. The peptide RZ-3 contains all D-amino acids, and has the sequence:

krnviywkag (SEQ ID NO:6) (RZ-3)

in which the conventional one-letter code is used and lower case designates a D-amino acid, and the sequence is written from the N-terminus to the C-terminus.

**Please add the following paragraphs at page 14, line 1 of the specification:**

#### BRIEF DESCRIPTION OF THE SEQUENCES

SEQ ID NO:1 is an upstream primer.

SEQ ID NO:2 is a downstream primer.

SEQ ID NO:3 is an upstream primer.

SEQ ID NO:4 is a downstream primer.

SEQ ID NO:5 is the amino acid sequence Lys-Met-Val-Ile-Tyr-Trp-Lys-Ala-Gly.

SEQ ID NO:6 is the RZ-3 peptide, the amino acid sequence Lys-Met-Val-Ile-Tyr-Trp-Lys-Ala-Gly, wherein each amino acid is a D-amino acid.

**Please insert the attached pages 1-3 of the Sequence Listing.**